

Title (en)
PECVD method with modulation of power

Title (de)
PECVD-Verfahren mit Leistungsmodulation

Title (fr)
Méthode PECVD avec modulation de puissance

Publication
EP 1780304 A3 20091118 (EN)

Application
EP 06022262 A 20061025

Priority
US 26459605 A 20051101

Abstract (en)
[origin: EP1780304A2] A method of generating a film during a chemical vapor deposition process is disclosed. One embodiment includes generating a first electrical pulse having a first pulse amplitude; using the first electrical pulse to generate a first density of radicalized species; disassociating a feedstock gas using the radicalized species in the first density of radicalized species, thereby creating a first deposition material; depositing the first deposition material on a substrate; generating a second electrical pulse having a second pulse amplitude, wherein the second pulse amplitude is different from the first pulse width; using the second electrical pulse to generate a second density of radicalized species; disassociating a feedstock gas using the radicalized species in the second density of radicalized species, thereby creating a second deposition material; and depositing the second plurality of deposition materials on the first deposition material.

IPC 8 full level
C23C 16/30 (2006.01); **C23C 16/515** (2006.01); **H01J 37/32** (2006.01)

CPC (source: EP US)
C23C 16/029 (2013.01 - EP US); **C23C 16/308** (2013.01 - EP US); **C23C 16/401** (2013.01 - EP US); **C23C 16/515** (2013.01 - EP US); **C23C 16/52** (2013.01 - EP US); **H01J 37/32201** (2013.01 - EP US)

Citation (search report)
• [X] EP 1561840 A1 20050810 - TOYO SEIKAN KAISHA LTD [JP]
• [X] US 2003143821 A1 20030731 - NIINO HIROAKI [JP], et al

Cited by
WO2014170696A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
EP 1780304 A2 20070502; **EP 1780304 A3 20091118**; CN 1958840 A 20070509; TW 200730662 A 20070816; TW I346147 B 20110801; US 2007098893 A1 20070503; US 2007098916 A1 20070503; US 7842355 B2 20101130

DOCDB simple family (application)
EP 06022262 A 20061025; CN 200610143249 A 20061101; TW 95138238 A 20061017; US 26459605 A 20051101; US 49262806 A 20060725